Association of age, education, and cognition with digital health literacy in older adults

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Purpose The advent of digital transformation presents various challenges, with digital health literacy serving as a tool in the context of digital health promotion. Digital health literacy (eHealth literacy) encompasses the skills and knowledge essential for individuals to interact with health technologies effectively, enabling them to address and resolve health-related issues (Faux-Nightingale et al., 2022). This study aims to investigate the association between age, education, cognition, and digital health literacy among older adults receiving primary healthcare assistance. Method A cross-sectional analytical study was conducted in 2023 with community-dwelling older adults in Recife, Pernambuco, Northeast Brazil. Digital health literacy was assessed using the eHealth Literacy Scale adapted for Brazil (eHEALS-Br), measuring individuals' perceived abilities to find, evaluate, and apply information technologies to health problems, with scores ranging from 8 to 40 points and classifications based on educational attainment (Mialhel et al., 2023). Age, education, and cognition were also assessed using the 10-point Cognitive Screener (10-CS) (Apolinário et al., 2016). Data were analyzed using descriptive and inferential statistics. Results and Discussion: A total of 311 older adults participated, with a mean age of 69.8 years, the majority of whom lived without a partner (58.5%). Low digital health literacy was most prevalent (47.6%) and was associated with education (p=0.001) and cognition (p=0.004). Age did not significantly influence digital health literacy. Despite the majority having more than 9 years of education, low digital health literacy persisted, possibly due to difficulties in accessing and understanding information in the digital environment. The absence of cognitive deficits positively impacted digital health literacy, with satisfactory results regarding the use of technologies for cognitive stimulation (Viviani et al., 2023). Thus, interventions promoting digital inclusion through digital health literacy can help reduce infodemics and potentially have positive impacts on memory and cognition.

References

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Table 1. Digital health literacy according to age, education and cognition in older adults assisted in a community. Recife (PE), Brazil, 2023

| Variable | | Digital Health Literacy | | | |
|-------------------|-------------|-------------------------|-------------------------|--------------------|--------------------|
| | N(%) | Low 148 (47,6%) | Moderate 115 (37,0%) | High 48 (15,4%) | p-value |
| | | | | | |
| 60 a 69 | 159 (51,1%) | 75 (24,1%) | 61 (19,6%) | 23 (7,4%) | 0,801 ¹ |
| 70 a 79 | 130 (41,8%) | 60 (19,3%) | 48 (15,4%) | 22 (7,1%) | |
| ≥ 80 | 22 (7,1%) | 13 (4,2%) | 6 (1,9%) | 3 (1,0%) | |
| Education (years) | | | | | |
| ≥9 | 197 (63,3%) | 99 (31,8%) | 59 (19,0%) | 39 (12,5%) | 0,001 ¹ |
| ≤ 8 | 114 (36,7%) | 49 (15,8%) | 56 (18,0%) | 9 (2,9%) | |
| Cognitive deficit | | | | | |
| Yes | 111 (35,7%) | 57 (18,3%) | 47 (15,1%) | 7 (2,3%) | 0,004 ¹ |
| No | 200 (64,3%) | 91 (29,3%) | 68 (21,9%) | 41 (13,2%) | |

¹Pearson's Chi-Square test